State of Hawaii
DEPARTMENT OF LAND AND NATURAL RESOURCES
Division of Aquatic Resources
Honolulu, Hawaii 96813

March 11, 2010

Board of Land
and Natural Resources
Honolulu, Hawaii

Request for Approval to Add Federal Funding ($350,000) and Extend through FY11 BLNR/RCUH Contract No. 58627 for the Division of Aquatic Resources' Maui/Oahu Marine Resources Assessment Project

Submitted herewith for your consideration is a request to amend and extend an existing Project Agreement (Contract No. 58627) between the Board of Land and Natural Resources (BLNR) and the Research Corporation of the University of Hawaii (RCUH). Amendment No. 1 will add funding in the amount of $350,000 and allow continuation of the project from July 1, 2010 to June 30, 2011. This Amendment is fully federally funded; no State General Funds are being used. Funds are being provided by a U.S. Fish and Wildlife Service Sport Fish Restoration grant. The required State matching component will be provided by DAR in-kind match and community-based volunteer services.

The goal of the project, as described below, is to provide information sufficient for the Division of Aquatic Resources (DAR) to be able to fulfill its mission to manage, conserve and restore the state's unique aquatic resources and ecosystems for present and future generations. The Agreement will enable DAR to secure assistance from RCUH in implementing the project. RCUH's assistance is required in order for DAR to meet project goals and objectives in a timely way.

The Maui/Oahu Marine Resource Assessments Project will increase DAR's capacity to gather high quality scientifically based information for use in the development of future management efforts, and for evaluating the effectiveness of current regulations. In FY11 continued monitoring will be performed to assess the effectiveness of the recently enacted lay gill-net ban around the entire island of Maui and at specific locations on Oahu. The assessment of the lay gill-net rules will involve shallow water visual census surveys as well as creel catch census efforts with recreational fishers. The project will also continue to examine causes of coral reef degradation at various locations with efforts made to specifically investigate the role that herbivorous fish and invertebrates play in helping control invasive seaweed growth and therefore, helping to maintain healthy coral reef habitats. Specific research will be conducted at the proposed Kahekili Herbivore Fisheries Management Area in Kaʻanapali, Maui. Past monitoring efforts at this location have identified lower than normal herbivorous fish populations, increasing problems with invasive seaweed growth and rapid coral reef degradation (50% of the living corals has disappeared in the last 14 years). This assessment project will look into fish

composition, grazing intensities and habitat health in this area and at suitable control locations. Of specific interest will be gathering information on the role that grazing marine species play in helping keep the habitat healthy and controlling invasive algae. Additional research efforts will look at identifying key grazing fish species, and will work on quantifying their beneficial effects on the coral reef ecosystem. Other aspects of Kahekili coral reef degradation research will center on developing techniques to measure land based pollution loads and to quantify how these loads change with changes on land (increased development, implementation of new watershed management efforts, etc.). Information from assessment efforts will be used to improve knowledge regarding the general state of Hawaii's broad scale marine resources. This knowledge will be important to document the immediate and possible long-term impacts from natural forces (storms, hurricanes, crown of thorn sea-star blooms, etc.), anthropogenic disturbances (runoff, pollution, over-fishing), and displacement of native marine species by alien species (fish, invertebrates and algae). Also in FY11, project personnel intend to establish and coordinate a citizen's science monitoring program to gather and record broad scale observational information such as the presence and abundance of critical grazing fish species, to monitor alien species abundances and distribution, and to help establish an early warning system for outbreaks of fish and coral diseases.

Amendment No. 1 to the Project Agreement is currently being prepared for submission to the Attorney General's Office for preliminary approval as to form. Also, Governor's approval to amend and extend the contract is being requested concurrently, through the Department of Budget and Finance for review and approval. DAR is aware that implementation of Amendment No. 1 is dependent upon receipt of all required approvals.

RECOMMENDATION:

"That the Board authorize the Chairperson to negotiate and, subject to necessary approvals, amend/extend a Project Agreement (Contract 58627) with the Research Corporation of the University of Hawaii for FY11."

Respectfully submitted,

DAN POLHEMUS
Administrator

APPROVED FOR SUBMITTAL:

LAURA H. THIELEN
Chairperson